

High available static pressure ducted hydronic units

UTN 3 - 23 kW



PLUS

- ✓ Compact dimensions (height 280 mm up to size 16 and 350 mm for larger sizes)
- ✓ Vertical and horizontal installation
- ✓ Wide range of available accessories for simple integration into the system
- ✓ Available head up to 180 Pa
- ✓ High flexibility of installation
- ✓ Can be integrated into the ERGO

Flexibility of installation to respond to every need

The UTN range of thermal ventilating units has been developed for air conditioning rooms where the use of ducted hydronic indoor units capable of assuring available heads of up to 180 Pa and cooling capacities of 3 to 23 kW is required. The units are characterised by a high flexibility of installation, as they can in fact be positioned either vertically or horizontally and the orientation of the air intake in the rear or front part of the unit itself can be modified by simply moving the inspection panel. All units have a standard configuration for the intake of fresh air and slots for rapidly fixing them to the wall or ceiling. Their reduced height (280 mm up to size 16 and 350 mm for larger sizes) enables them to be accommodated in normal false ceiling and the availability of a wide range of plumbing and ventilation accessories makes it easy to integrate them into air conditioning systems. The units are available in standard and high-efficiency models, depending on the finned block exchanger used, so that they can be better adapted to the needs of the room to be air-conditioned.

AVAILABLE VERSIONS

UTN

Thermal ventilating unit suitable for 2-pipe systems

UTN DF

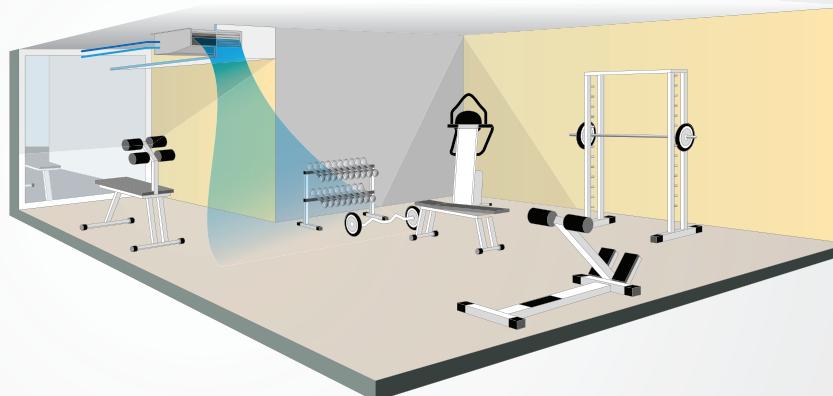
Thermal ventilating unit suitable for 4-pipe systems (2 heat exchangers)

UTN DP

The version with double panelling is made with pre-painted sheet steel insulated with class 0 fire-resistant rockwool.

Comfort and hygiene

UTN can be equipped with the exclusive ionisation system developed by Galletti to eliminate every trace of bacterial contamination from air-conditioned rooms and from the hydronic indoor unit itself.





MAIN COMPONENTS

Structure

Made of galvanized sheet steel insulated with sound-deadening, heat-insulating, self-extinguishing closed-cell material to reduce noise emissions and prevent the formation of condensate on the outside surface.

Heat exchanger

It is composed of copper tubing and aluminium fins fixed by expansion. The water connections are reversible. An additional exchanger is available for installing the unit in 4-pipe systems.

Fan

The aluminium fans are of the centrifugal type, with double suction and staggered blades to reduce noise emissions. They are statically and dynamically balanced to minimize the stresses transmitted to the motor shaft.



Filter module

The air filter, made of regenerable acrylic fibre, is available as an accessory in filtration classes G2 or G4.



Electric motor

Three-speed electrical motor, mounted on vibration damping couplings, directly connected to the fans, with permanently activated capacitor and winding thermal protection.

Condensate collection and drainage system

It consists of two insulated galvanized sheet steel trays designed for horizontal and vertical installation.

ACCESSORIES

CONTROL PANELS AND THERMOSTATS

CD	Recess wall-mounted speed selector
CDE	Wall-mounted speed selector
TD	Wall-mounted speed selector, thermostat and summer/winter selecting switch
TDC	Wall-mounted speed selector and thermostat
TD4T	Wall-mounted speed selector, thermostat and summer/winter selecting switch for 2 or 4-pipe systems with valves
MCBE	MYCOMFORT BASE electronic controller with display
MCME	MYCOMFORT MEDIUM electronic controller with display
MCLE	MYCOMFORT LARGE electronic controller with display
EVO	Wall-mounted microprocessor controller
MCSWE	Water/air sensor for MYCOMFORT BASE, MYCOMFORT MEDIUM, MYCOMFORT LARGE and LED503 microprocessor controllers.
LED503	Recess wall-mounted microprocessor controller
TC	Thermostat for minimum water temperature in heating mode, mounted on the heat exchanger
KP	Power interface for connecting in parallel up to 4 fan coils to one controller
IPM	Circuit board for connection of UTN 30, UTN 30 A, UTN 40 and UTN 40A
TA	Ambient thermostat
TA2	Ambient thermostat with summer/winter selecting switch
CSD	Recess mounted controller for opening and closing the PA 90 motor-driven regulating louver

AIR INTAKE MODULES WITH FILTER

MAF	Air intake module with G2 flat filter
MAFO	Air intake module with G4 undulated filter

AIR INTAKE AND OUTLET JUNCTION PANELS

PCOC	Junction panel with rectangular duct
PCOF	Junction panel with flexible circular duct Ø 200
G90	90° elbow outlet and inlet connector

MOTOR-DRIVEN VALVES AND DRIP TRAYS

V	3-way motor-driven valve
M	ON/OFF and modulating motors, modulating motors for motor driven valves V
R	Hydraulic connector kit for installation of V valve
VRCV	Water drip tray for vertical installation UTN
VRCH	Water drip tray for horizontal installation UTN
KSC1	Condensate drainage pump

HOT WATER POST-HEATING COILS

BP	Post-heating kit with hot water coil
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ELECTRICAL HEATING ELEMENTS

RE	Heating elements, safety devices, power relay box
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MOTOR DRIVEN EXTERNAL AIR INTAKE LOUVER

PA90	Motor-driven external air intake louver
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VIBRATION-DAMPING COUPLINGS

GA	PVC vibration-damping coupling
GAT	Heat-resistant silicone-coated cloth vibration-damping coupling

HOSES - PLUGS

TFA	Uninsulated hose Ø 200 mm
TFM	Insulated hose Ø 200 mm
TP	Plastic plug Ø 200 mm

AIR INTAKE AND OUTLET DUCTS

CA	Air intake duct with honeycomb grille
CAF	Air intake duct with honeycomb grille and G2 filter
CM	Insulated air outlet duct, with 2-way grille

AIR OUTLET AND INTAKE GRILLES

GM	Aluminium air outlet grille, with subframe
GR	Aluminium air intake grille, with subframe

Rated technical data

UTN		0 6			0 6A			0 8			0 8A		
Fan speed		min	med	max	min	med	max	min	med	max	min	med	max
Air flow (E)	m ³ /h	364	490	614	360	482	600	555	747	800	552	736	864
Available static pressure (E)	Pa	28	50	75	28	50	75	29	50	65	30	50	65
Total cooling capacity (1) (E)	kW	2,02	2,58	3,03	2,30	3,00	3,58	2,87	3,54	3,91	3,42	4,27	4,76
Sensible cooling capacity (1) (E)	kW	1,55	1,99	2,35	1,71	2,25	2,71	2,23	2,77	3,09	2,58	3,26	3,67
Water flow (1)	l/h	360	461	549	413	539	651	508	637	708	606	770	864
Water pressure drop (1) (E)	kPa	5	8	11	4	6	9	10	14	17	8	12	14
Heating capacity (2) (E)	kW	2,61	3,27	3,81	2,94	3,75	4,43	3,63	4,41	4,85	4,25	5,22	5,79
Water flow (2)	l/h	360	461	549	413	539	651	508	637	708	606	770	864
Water pressure drop (2) (E)	kPa	4	7	9	3	5	7	8	12	14	7	10	12
DF heating capacity (4 pipes) (3) (E)	kW	3,03	3,54	3,95	5,20	7	3,92	3,77	4,34	4,63	3,76	4,31	4,60
Water flow (3)	l/h	266	310	346	457	582	344	331	382	407	331	378	403
Water pressure drop (3) (E)	kPa	4	6	7	4	6	7	7	8	9	7	8	9
Standard heat exchanger - rows	n°	3			4			3			4		
DF heat exchanger - rows	n°	1			1			1			1		
Power supply	V/ph/Hz	230 / 1 / 50											
Maximum power input (E)	W	84	122	188	84	122	188	135	185	234	135	185	265
Sound power (4)	dB(A)	48	57	63	48	57	63	54	61	66	54	61	66
Sound power air outlet (4) (E)	dB(A)	46	54	61	46	54	61	52	59	62	52	59	64
Sound power air inlet + radiated (4) (E)	dB(A)	45	53	59	45	53	59	51	58	58	51	58	63

UTN		12			12A			16			16 A		
Fan speed		min	med	max	min	med	max	min	med	max	min	med	max
Air flow (E)	m ³ /h	1124	1290	1473	1097	1257	1424	1318	1553	1890	1309	1538	1851
Available static pressure (E)	Pa	40	50	59	41	50	59	38	50	67	38	50	66
Total cooling capacity (1) (E)	kW	5,32	5,77	6,16	5,88	6,37	6,80	6,32	7,01	7,82	6,96	7,79	8,74
Sensible cooling capacity (1) (E)	kW	4,00	4,32	4,62	4,45	4,85	5,19	5,13	5,77	6,54	5,52	6,24	7,08
Water flow (1)	l/h	984	1088	1198	1086	1206	1326	1160	1310	1510	1286	1467	1697
Water pressure drop (1) (E)	kPa	18	21	24	15	17	19	17	20	24	11	13	16
Heating capacity (2) (E)	kW	6,67	7,20	7,66	7,50	8,11	8,63	7,74	8,52	9,45	8,69	9,62	10,7
Water flow (2)	l/h	984	1088	1198	1086	1206	1326	1160	1310	1510	1286	1467	1697
Water pressure drop (2) (E)	kPa	15	17	19	13	15	18	13	16	20	9	10	13
DF heating capacity (4 pipes) (3) (E)	kW	6,26	6,65	7,02	6,19	6,57	6,92	8,35	9,00	9,81	8,32	8,96	9,72
Water flow (3)	l/h	551	583	616	544	576	608	731	788	860	731	785	853
Water pressure drop (3) (E)	kPa	16	17	19	13	15	16	11	12	15	26	30	34
Standard heat exchanger - rows	n°	3			4			3			4		
DF heat exchanger - rows	n°	1			1			1			1		
Power supply	V/ph/Hz	230 / 1 / 50											
Maximum power input (E)	W	345	385	460	345	385	460	290	380	505	290	380	505
Sound power (4)	dB(A)	59	63	69	61	63	69	62	67	72	62	67	72
Sound power air outlet (4) (E)	dB(A)	56	60	66	56	60	66	60	64	70	60	64	70
Sound power air inlet + radiated (4) (E)	dB(A)	55	59	65	59	59	65	58	63	69	58	63	69

(1) Water temperature 7-12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)

(2) Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C

(3) Water temperature 70 / 60°C, air temperature 20°C

(4) Sound power measured according to standards ISO 3741 and ISO 3742

(E) EUROVENT certified data



Rated technical data

UTN		22			22 A			30			30 A		
Fan speed		min	med	min	min	med	min	min	med	min	min	med	min
Air flow (E)	m³/h	1591	2101	2758	1585	2101	2785	2154	2739	3335	2136	2700	3302
Available static pressure (E)	Pa	30	50	78	31	50	75	31	50	74	32	50	74
Total cooling capacity (1) (E)	kW	8,78	10,7	12,6	9,57	11,7	13,8	12,5	14,9	17,2	13,8	16,5	19,0
Sensible cooling capacity (1) (E)	kW	6,72	8,28	9,97	7,13	8,85	10,6	9,48	11,5	13,5	10,3	12,5	14,8
Water flow (1)	l/h	1592	1973	2407	1741	2177	2643	2194	2631	3040	2422	2901	3359
Water pressure drop (1) (E)	kPa	15	21	29	12	17	22	21	29	37	27	37	48
Heating capacity (2) (E)	kW	10,8	13,0	15,2	11,7	14,1	16,5	15,2	18,1	20,8	16,5	19,7	22,9
Water flow (2)	l/h	1592	1973	2407	1741	2177	2643	2194	2631	3040	2422	2901	3359
Water pressure drop (2) (E)	kPa	12	17	23	10	14	18	17	23	30	22	30	39
DF heating capacity (4 pipes) (3) (E)	kW	12,9	15,3	17,9	12,9	15,3	18,0	17,2	19,9	22,5	17,1	19,8	22,3
Water flow (3)	l/h	1130	1339	1573	1127	1339	1580	1508	1750	1969	1501	1735	1958
Water pressure drop (3) (E)	kPa	8	11	15	8	11	15	11	14	17	11	14	17
Standard heat exchanger - rows	n°	3			4			4			5		
DF heat exchanger - rows	n°	1"			2			2			2		
Power supply	V/ph/Hz	230 / 1 / 50											
Maximum power input (E)	W	1130	1339	1573	1127	1339	1580	1508	1750	1969	1501	1735	1958
Sound power (4)	dB(A)	60	67	74	60	67	74	69	73	78	69	73	78
Sound power air outlet (4) (E)	dB(A)	58	65	72	58	65	72	67	71	76	67	71	76
Sound power air inlet + radiated (4) (E)	dB(A)	57	64	71	57	64	71	66	70	75	66	70	75

UTN		40			40 A		
Fan speed		min	med	min	min	med	min
Air flow (E)	m³/h	3472	3706	4422	3102	3622	4287
Available static pressure (E)	Pa	35	50	71	35	50	71
Total cooling capacity (1) (E)	kW	17,4	18,2	20,7	18,1	20,4	23,2
Sensible cooling capacity (1) (E)	kW	13,8	14,6	16,7	14,1	16,1	18,6
Water flow (1)	l/h	2983	3422	3977	3339	3840	4455
Water pressure drop (1) (E)	kPa	20	21	26	16	20	25
Heating capacity (2) (E)	kW	20,5	23,1	26,1	22,5	25,4	28,7
Water flow (2)	l/h	2983	3422	3977	3339	3840	4455
Water pressure drop (2) (E)	kPa	18	21	27	17	21	26
DF heating capacity (4 pipes) (3) (E)	kW	20,9	23,0	25,4	20,7	22,7	24,9
Water flow (3)	l/h	1836	2016	2226	1818	1989	2188
Water pressure drop (3) (E)	kPa	12	14	16	11	13	16
Standard heat exchanger - rows	n°	4			5		
DF heat exchanger - rows	n°	1"			1"		
Power supply	V/ph/Hz	230 / 1 / 50					
Maximum power input (E)	W	68	71	75	68	71	75
Sound power (4)	dB(A)	70	74	79	70	74	79
Sound power air outlet (4) (E)	dB(A)	68	71	75	68	71	75
Sound power air inlet + radiated (4) (E)	dB(A)	67	72	75	67	72	75

(1) Water temperature 7-12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)

(2) Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C

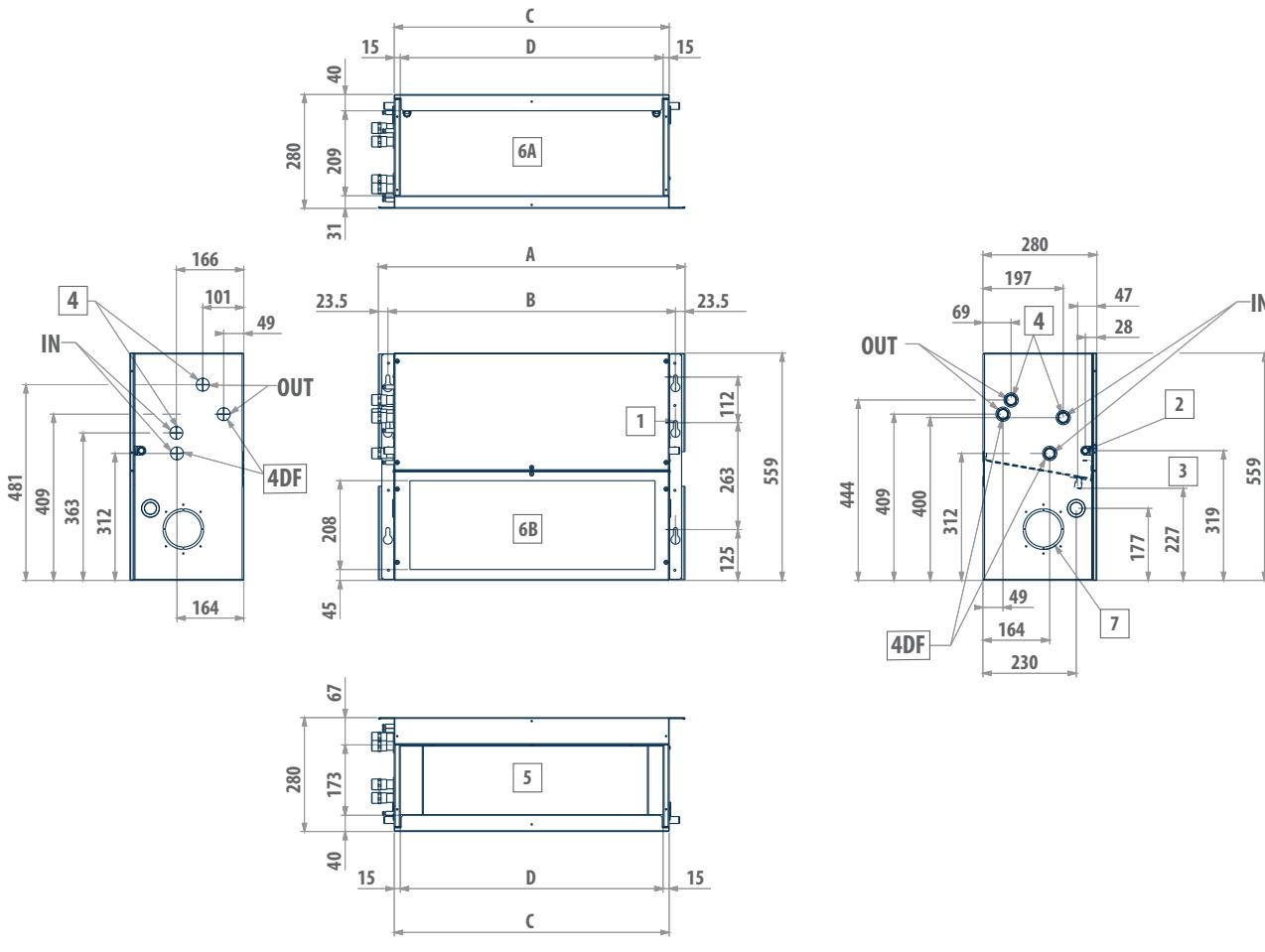
(3) Water temperature 70 / 60°C, air temperature 20°C

(4) Sound power measured according to standards ISO 3741 and ISO 3742

(E) EUROVENT certified data

Dimensional drawings

UTN 06 - 16



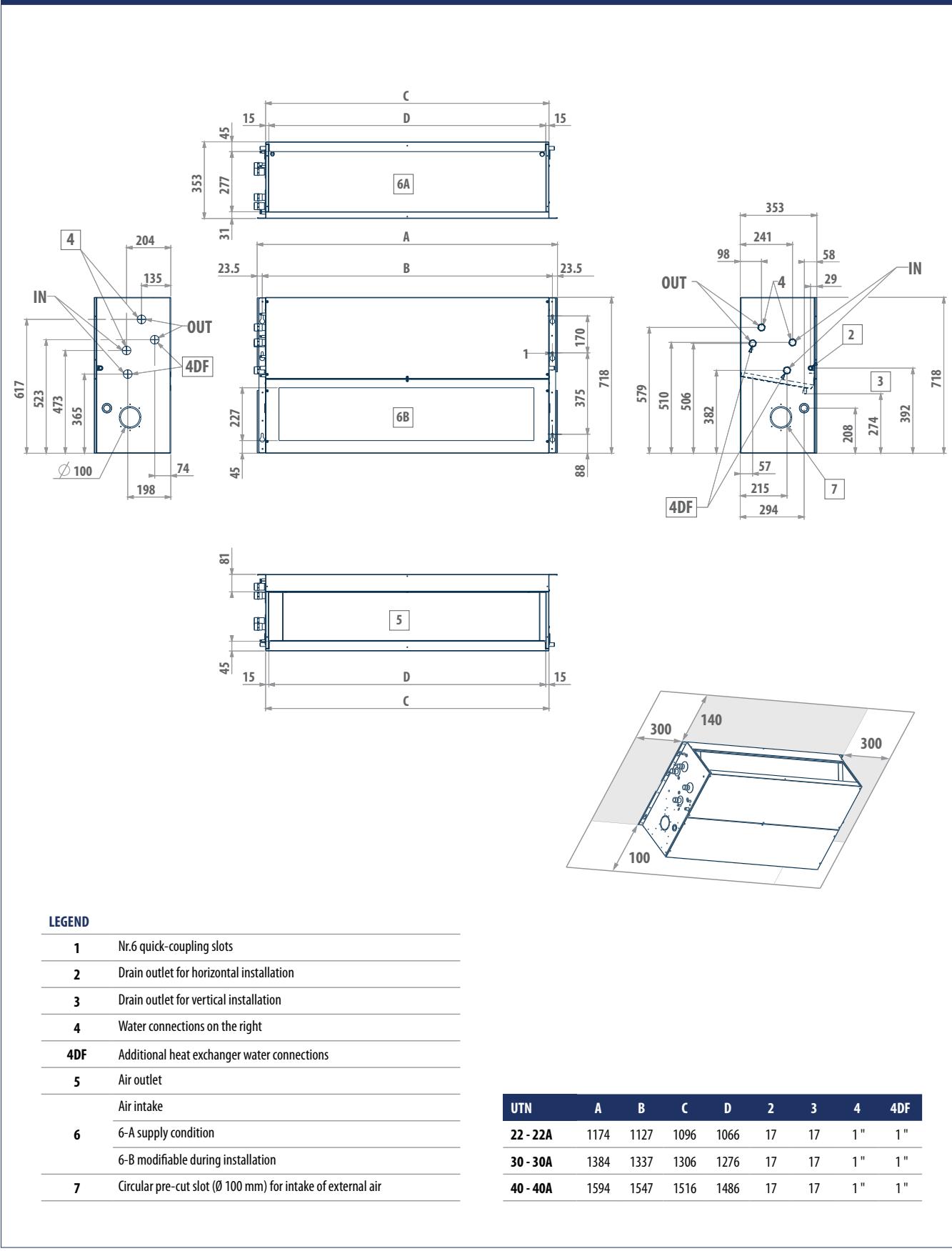
LEGEND

- 1** Nr.6 quick-coupling slots
- 2** Drain outlet for horizontal installation
- 3** Drain outlet for vertical installation
- 4** Water connections on the right
- 4DF** Additional heat exchanger water connections
- 5** Air outlet
- Air intake
- 6** 6-A supply condition
- 6-B modifiable during installation
- 7** Circular pre-cut slot ($\varnothing 100$ mm) for intake of external air

UTN	A	B	C	D	2	3	4	4DF
06 - 06A	754	707	676	646	17	17	3 / 4"	3 / 4"
08 - 08A	754	707	676	646	17	17	3 / 4"	3 / 4"
12 - 12A	964	917	886	856	17	17	3 / 4"	3 / 4"
16 - 16A	1174	1127	1096	1066	17	17	3 / 4"	3 / 4"



Dimensional drawings

UTN 22 - 40


High available static pressure ducted hydronic units with BLDC motor

UTN i 4 - 10 kW



 Inverter Technology



PLUS

- ✓ Permanent magnet BLDC motor
- ✓ Low electricity consumption
- ✓ Easy setup of ventilation section
- ✓ Reduced height across the entire range (280 mm)
- ✓ Vertical and horizontal installation
- ✓ Vast range of available accessories
- ✓ High flexibility of installation

High efficiency and low noise emissions for ducted applications

The thermal ventilating units of the UTNi range with inverter motors and cooling capacities of 4 to 10 kW represent an evolution of the UTN series: keeping in pace with current legislation on energy savings and equipment efficiency and the most recent technological developments in the realm of electric motors, Galletti offers ducted units equipped with inverter-controlled permanent magnet BLDC motors. This solution makes it possible to reduce electricity consumption by up to 70% compared to a traditional asynchronous motor and at the same time offers the possibility of achieving a precise regulation of air flow, thanks to its ability to vary the number of fan revolutions in a continuous and efficient manner. The particular features which characterize the UTN series, namely, the height of 280 mm to enable the units to be accommodated in false ceilings, flexibility of installation and connection to air ducts and wide selection of accessories, are maintained to ensure the same standards of quality. Moreover, the availability of heat exchangers with a large number of rows makes it possible to use a low-temperature thermal carrier fluid in the heating mode, which means further energy savings.

AVAILABLE VERSIONS

UTN i

Thermal ventilating unit suitable for 2-pipe systems

UTN i DF

Thermal ventilating unit suitable for 4-pipe systems (2 heat exchangers)

UTN i DP

The version with double panelling is made with pre-painted sheet steel insulated with class 0 fire-resistant rockwool.

Comfort and quiet operation

Thanks to the possibility of regulating the rotation speed of the motor with high precision, UTN i is well-suited to interiors where keeping noise levels low is a must.





MAIN COMPONENTS

Structure

Made of galvanized sheet steel insulated with sound-deadening, heat-insulating, self-extinguishing closed-cell material to reduce noise emissions and prevent the formation of condensate on the outside surface.

Heat exchanger

It is composed of copper tubing and aluminium fins fixed by expansion. The water connections are reversible. An additional exchanger is available for installing the unit in 4-pipe systems.

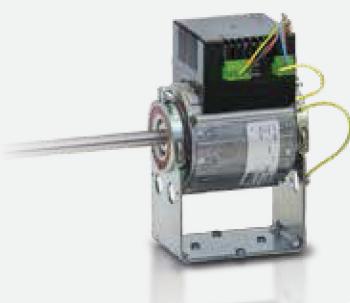
Fan

The aluminium fans are of the centrifugal type, with double suction and staggered blades to reduce noise emissions. They are statically and dynamically balanced to minimize the stresses transmitted to the motor shaft.



BLDC electric motor

Permanent magnet motor. The unit is equipped with an inverter board to control the motor, that makes it possible to precisely set the maximum rotation speed (control signal 0-10 V).



Condensate collection and drainage system

It consists of two insulated galvanized sheet steel trays designed for horizontal and vertical installation.

Filter module

The air filter, made of regenerable acrylic fibre, is available as an accessory in filtration classes G2 or G4.

ACCESSORIES

CONTROL PANELS AND THERMOSTATS

MCLE MYCOMFORT LARGE

EVO Wall-mounted microprocessor controller

MCSWE Water/air sensor for MYCOMFORT BASE, MYCOMFORT MEDIUM, MYCOMFORT LARGE and LED503 microprocessor controllers.

AIR INTAKE MODULES WITH FILTER

MAF Air intake module with G2 flat filter

MAFO Air intake module with G4 undulated filter

AIR INTAKE AND OUTLET JUNCTION PANELS

PCOC Junction panel with rectangular duct

PCOF Junction panel with flexible circular duct Ø 200

G90 90° elbow outlet and inlet connector

MOTOR-DRIVEN VALVES AND DRIP TRAYS

V 3-way motor-driven valve

M ON/OFF and modulating motors, modulating motors for motor driven valves V

R Hydraulic connector kit for installation of valve

VRCV Water drip tray for vertical installation UTN

VRCH Water drip tray for horizontal installation UTN

KSC1 Condensate drainage pump

HOT WATER POST-HEATING COILS

BP Post-heating kit with hot water coil

ELECTRICAL HEATING ELEMENTS

RE Heating elements, safety devices, power relay box

MOTOR DRIVEN EXTERNAL AIR INTAKE LOUVER

PA90 Motor-driven external air intake louver

VIBRATION-DAMPING COUPLINGS

GA PVC vibration-damping coupling

GAT Heat-resistant silicone-coated cloth vibration-damping coupling

HOSES - PLUGS

TFA Uninsulated hose Ø 200 mm

TFM Insulated hose Ø 200 mm

TP Plastic plug Ø 200 mm

AIR INTAKE AND OUTLET DUCTS

CA Air intake duct with honeycomb grille

CAF Air intake duct with honeycomb grille and G2 filter

CM Insulated air outlet duct, with 2-way grille

AIR OUTLET AND INTAKE GRILLES

GM Aluminium air outlet grille, with subframe

GR Aluminium air intake grille, with subframe

Rated technical data

UTN i		0 8		08A			12			12A		
Fan speed		min	med	min	med	min	min	med	min	min	med	min
Air flow (E)	m³/h	555	747	800	552	736	864	1124	1290	1473	1097	1257
Available static pressure (E)	Pa	29	50	65	30	50	65	40	50	59	41	50
Total cooling capacity (1) (E)	kW	2,87	3,54	3,91	3,42	4,27	4,76	5,32	5,77	6,16	5,88	6,37
Sensible cooling capacity (1)	kW	2,23	2,77	3,09	2,58	3,26	3,67	4,00	4,32	4,62	4,45	4,85
Water flow (1)	l/h	508	637	708	606	770	864	984	1088	1198	1086	1206
Water pressure drop (1) (E)	kPa	10	14	17	8	12	14	18	21	24	15	17
Heating capacity (2) (E)	kW	3,63	4,41	4,85	4,25	5,22	5,79	6,67	7,20	7,66	7,50	8,11
Water flow (2)	l/h	508	637	708	606	770	864	984	1088	1198	1086	1206
Water pressure drop (2) (E)	kPa	8	12	14	7	10	12	15	17	19	13	15
DF heating capacity (4 pipes) (3) (E)	kW	3,77	4,34	4,63	3,76	4,31	4,60	6,26	6,65	7,02	6,19	6,57
Water flow (3)	l/h	331	382	407	331	378	403	551	583	616	544	576
Water pressure drop (3) (E)	kPa	7	8	9	7	8	9	16	17	19	13	15
Standard heat exchanger - rows	n°	3		4			3			4		
DF heat exchanger - rows	n°	1		1			1			1		
Power supply	V/ph/Hz	230 / 1 / 50										
Maximum power input (E)	W	40	73	112	40	73	112	102	125	152	102	125
Sound power (4)	dB(A)	54	61	66	54	61	66	59	63	69	61	69
Sound power air outlet (4) (E)	dB(A)	52	59	63	52	59	64	56	60	66	56	60
Sound power air inlet + radiated (4) (E)	dB(A)	51	58	58	51	58	63	55	59	65	59	65

UTN i		16		16 A		
Fan speed		min	med	min	med	min
Air flow (E)	m³/h	1318	1553	1890	1309	1538
Available static pressure (E)	Pa	38	50	67	38	50
Total cooling capacity (1) (E)	kW	6,32	7,01	7,82	6,96	7,79
Sensible cooling capacity (1)	kW	5,13	5,77	6,54	5,52	6,24
Water flow (1)	l/h	1160	1310	1510	1286	1467
Water pressure drop (1) (E)	kPa	17	20	24	11	13
Heating capacity (2) (E)	kW	7,74	8,52	9,45	8,69	9,62
Water flow (2)	l/h	1160	1310	1510	1286	1467
Water pressure drop (2) (E)	kPa	13	16	20	9	10
DF heating capacity (4 pipes) (3) (E)	kW	8,35	9,00	9,81	8,32	8,96
Water flow (3)	l/h	731	788	860	731	785
Water pressure drop (3) (E)	kPa	11	12	15	26	30
Standard heat exchanger - rows	n°	3		4		
DF heat exchanger - rows	n°	1		1		
Power supply	V/ph/Hz	230 / 1 / 50				
Maximum power input (E)	W	124	170	248	124	170
Sound power (4)	dB(A)	62	67	72	62	67
Sound power air outlet (4) (E)	dB(A)	60	64	70	60	64
Sound power air inlet + radiated (4) (E)	dB(A)	58	63	69	58	63

(1) Water temperature 7-12°C, air temperature D.B. 27°C, W.B. 19°C (47% relative humidity)

(2) Inlet water temperature 50°C, water flow rate same as in cooling mode, air temperature 20°C

(3) Water temperature 70 / 60°C, air temperature 20°C

(4) Sound power measured according to standards ISO 3741 and ISO 3742

(E) EUROVENT certified data



Dimensional drawings

